WHAT IS CLAIMED IS:

1. A method for finding an optimal dip angle in a prescribed environment using an electronic compass containing a two-axis geomagnetic sensor, comprising the steps of:

a) setting a predetermined azimuth angle indicative of a horizontal status of a geomagnetic sensor to a reference azimuth angle "ψref";

b) if the electronic compass is slightly tilted on the basis of the reference azimuth angle "ψ ref", stepwise-increasing a dip angle "λ" within a predetermined dip angle search range, and calculating azimuth angles "ψmi" associated with individual dip angles;

c) comparing the calculated azimuth angles "ψ mi" with the prescribed reference azimuth angle "ψref", and finding one azimuth angle, which is the closest to the reference azimuth angle "ψref", from among the calculated azimuth angles "ψmi"; and

d) setting the dip angle "λ" applied to the found azimuth angle to a specific dip angle associated with a corresponding azimuth angle.

2. The method as set forth in claim 1, wherein the step (b) for calculating the azimuth angles "ψ mi" includes the step of:

b1) stepwise-increasing the dip angle one-step at a time within a range from -90° to +90° (i.e., a dip angle search range of approximately " ± 90°") to calculate azimuth angles associated with individual dip angles.

3. The method as set forth in claim 1, wherein the step (b) for calculating the azimuth angles " ψ mi" includes the step of:

b2) stepwise-increasing the dip angle by approximately 1° within the predetermined dip angle search range, and calculating azimuth angles associated with individual dip angles.

4. The method as set forth in claim 1, wherein the step (b) for calculating the azimuth angles " ψ mi" includes the step of:

b3) stepwise-increasing the dip angle by approximately 1° within a range from -90° to +90° (i.e., a dip angle search range of approximately " ± 90°") to calculate azimuth angles associated with individual dip angles.